

REMARKS

The Office Action mailed December 18, 2007, has been reviewed and carefully considered. Claims 1-2, 4-12 and 14-15 have been amended. Claims 1-15 are pending in the application.

In paragraph 2 on page 2 of the Office Action, claims 7-10 were objected to because of certain informalities.

Applicants respectfully traverse the rejection, but in the interest of expediting prosecution have amended claims 7-10 to overcome the rejection. Applicant respectfully submits that these amendment to claims 7-10 do not narrow the scope of the claims, but rather merely clarify the invention

In paragraph 4 on page 3 of the Office Action, claims 1-15 were rejected under 35 U.S.C. § 112, first paragraph as being based on a disclosure that is not enabling.

Applicants respectfully traverse the rejection, but in the interest of expediting prosecution have amended independent claims 1 and 6 and 11 to overcome the rejection.

In paragraph 6 on page 3 of the Office Action, claims 1-15 were rejected under § 103(a) as being unpatentable over Smith in view of Felts, et al.

In paragraph 3 on page 4 of the Office Action, claims 3, 8 and 13 were rejected under § 103(a) as being unpatentable over Eagan et al. and Haddock in further view of Smith.

Applicants respectfully traverse the rejection, but in the interest of expediting prosecution have amended independent claims 1 and 6 and 11 to overcome the rejection.

Smith merely teaches the measurement of absolute clearance between the MR transducer and the medium is for a nominal medium-transducer velocity. Smith suggests

changing the velocity of the medium to identify a velocity that results in a desired fly height. However, Smith fails to disclose, teach or suggest that, prior to initialization, a back portion of an air-bearing surface of a slider bearing a MR head is positioned to be co-planar with a recording surface. Smith also fails to suggest then executing burnishing operations on the back portion of the air bearing surface to remove material from the back portion of the air-bearing surface.

Smith discloses that the MR element is used to monitor a signal that varies as a function of clearance between the MR element and the medium, reducing a velocity of the medium relative to the MR transducer, monitoring, while reducing the medium-transducer velocity, a rate of change of the signal and computing, for a nominal medium-transducer velocity, absolute clearance between the MR transducer and the medium using the rate of change of the signal. However, Smith does not disclose, teach or suggest monitoring resistance measurements of the MR head representing interference between the air-bearing surface of the slider and the recording surface to determine whether the measured resistance of the MR head indicates the head has clearance between the air-bearing surface of the slider and the recording surface. Rather, Smith discloses that the velocity is reduced to a nominal velocity.

Smith also does not disclose that a burnishing operation continues when clearance between the air-bearing surface of the slider and the recording surface is not detected. Rather, Smith only discloses computing for a nominal velocity the absolute clearance between the MR transducer and the medium using the rate of change of the signal.

Accordingly, Smith fails to disclose, teach or suggest Applicants' invention as recited in independent claims 1, 6 and 11.

Felts et al. fail to overcome the deficiencies of Smith. Felts et al. discloses that a burnish cycle is completed after a burnish seek time has elapsed.

Felts et al. fail to disclose, teach or suggest that, prior to initialization, a back portion of an air-bearing surface of a slider bearing a MR head is positioned to be co-planar with a recording surface. Felts et al. also fail to disclose, teach or suggest that when clearance between the air-bearing surface of the slider and the recording surface is not detected based upon the monitoring of the resistance measurements of the MR head, lowering a fly-height between the back portion of the air-bearing surface of the MR head and the recording surface and executing burnishing operations on the back portion of the air bearing surface to remove material from the back portion of the air-bearing surface until the monitoring of the resistance measurements of the MR head indicates the air-bearing surface of the slider has clearance above the recording surface.

Rather, Felts et al. merely burnish a surface of a magnetic disk. Felts et al. is not concerned with burnishing material off a slider. Also, Felts et al. does not disclose executing burnish operations on the back portion of the air bearing surface to remove material from the back portion of the air-bearing surface until the monitoring of the resistance measurements of the MR head indicates the air-bearing surface of the slider has clearance above the recording surface.

Accordingly, Smith and Felts et al., alone or in combination, fail to disclose, teach or suggest Applicants' invention as recited in independent claims 1, 6 and 11.

Dependent claims 2-5, 7-10 and 12-15 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 1, 6 and 11, respectively. Further dependent claims 2-5, 7-10 and 12-15 recite additional

novel elements and limitations. Applicants reserve the right to argue independently the patentability of these additional novel aspects. Therefore, Applicants respectfully submit that dependent claims 2-5, 7-10 and 12-15 are patentable over the cited references.

On the basis of the above remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'David W. Lynch', written over a horizontal line.

By: _____

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